Energy Innovations Small Grant Program
Final Report Instructions

1. Send an outline of the final report that is about the length of the executive summary including the project's Objectives, Outcomes, Conclusions and Recommendations to the EISG Project Manager or Program Administrator listed below.

2. An EISG staff person will provide comments on the final report outline. This is intended to provide early feedback and facilitate the production of the report.

3. Email your draft final report to the EISG Project Manager or Program Administrator listed below and wait for approval to mail hard copies.

4. When the draft final report has been approved and you are ready to submit hard copies, clearly label them as "DRAFT." Send 3 paper copies and 1 electronic copy in MS Word. One half of the project's withheld invoice balance will be paid when the draft final report is satisfactorily received.

5. The draft final report will be sent to independent technical reviewers for comment and evaluation.

6. The technical reviewer's comments will be sent to the project's Principal Investigator to make the appropriate revisions to the final report.

7. Send 1 electronic copy of the modified final report via email with revisions highlighted in "Track Changes" mode or otherwise indicated. Do not send the final report until it has been confirmed by EISG staff that the revisions satisfactorily address technical reviewer comments.

8. Send 2 paper copies of the final report and 1 electronic copy of the final report in MS Word on cd or disk.

9. After the revised final report has been accepted and approved, the remaining withheld balance (typically $2,500) will be paid.

10. If proprietary/confidential information is needed in the report to fully communicate the research findings, all such information must be confined to a proprietary appendix, which will be protected and not released to the public. The remainder of the report must be non-proprietary and authorized unrestricted public distribution.

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Final Report Formatting

Style Instructions

Font Type: Times Roman or Helvetica
Font Size: 12 pt
Margins: 1-inch minimum
Headers/Footers: No headers. No Footers, except page numbers. Use continuous page number footer from front to back except for front matter, which is numbered with roman numerals. Do not number paragraphs or sections.
Bindings: Spring clips only
Copies: Draft Report (3 paper copies, 1 electronic MS Word copy emailed or on disk)
   Revised Draft Report (1 electronic version via email)
   Final Report (2 paper copies, 1 electronic MS Word copy emailed or on disk)
Paper Copies: Printed single sided

Final Report Outline

Cover Page *(example provided)*
Legal Notice *(provided)*
Acknowledgement Page *(optional)*
Table of Contents *(example provided)*
Abstract *(250 words)*
Executive Summary *(2-3 pages)*
Body of Report *(12-18 pages)*
 Introduction
 Project Objectives
 Project Approach
 Project Outcomes
 Conclusions
 Recommendations
 Public Benefits to California
Endnotes
References
Glossary
Appendices *(no limit specified)*
Development Status Questionnaire

General Guidelines

Please see the template attached for the final report format.

1. The report should be written to the level of an inquisitive, reasonably well-educated lay reader. Imagine that the reader just paid for this research project and they want to understand how you spent their money and the rationale for proceeding in the direction chosen.

2. Apply the test of completeness. Are all the pieces there? Are all the references clear and do those in the text match those in the reference section? Are the relationships between the partners and the players clearly explained?

3. Apply the test of logic. Does the document flow and make sense? Is the need for the research clearly described? Is the technical approach clearly described? Do the conclusions make sense? Are they drawn from the analysis? Do the numbers check? Is it clear how the numbers were derived?

4. The final report must address the specific research objectives outlined in the original statement of work awarded funding by the EISG Program. The Project Objectives and Outcomes sections will be organized according to the objectives outlined in the project's statement of work The Project Approach section will be organized according to the tasks outlined in the statement of work.

5. If the project didn't do everything it intended to do, explain in the Conclusions sections. Explain any modifications in research design in the Project Approach section.

6. In projects where there was cost sharing with other funding sources you need to make clear what portions were funded with EISG funds. If the EISG project was a small part of a larger project, only report on the work accomplished with the funds provided by the EISG grant. The main body of the final report is only 10-12 pages long, therefore focus should remain on the tasks and objectives outlined in the proposal awarded EISG funding.

7. The methods used to conduct the research need to be explained in the project approach section.

8. Data that is presented in the report needs to be analyzed. If you present a picture, graph or table, be sure that you discuss and interpret its meaning in the text, not just refer to it.

9. Each conclusion needs to be substantiated by the analysis contained in the report.

10. Figures and Tables must clearly relate to, and be consistent with the text, and vice versa. (If the text says the generator had a capacity of 30 kW, the table should not say it was 31.2 kW.)

11. Use consistent references to report performance specifications and results. For example, if a piece of equipment is to be referred to by its nominal nameplate rating then use that reference consistently throughout the report. If, however, the desired number was the measured performance of the device, (almost always different from nameplate) then consistently use that measured number. Do not mix the two in the narrative.

12. The text needs to clearly refer to the attached appendices. It should also explain how the data in the appendices matters to the text. If it doesn't really matter, it probably should be dropped. (You may still need it because it is a deliverable according to the grant agreement, so check this carefully.) References to multi-page appendices need to be specific to the page or section of the appendix, not just a general reference to Appendix X.

13. The abbreviation "CEC" is not allowed in final reports. Choose either Commission or Energy Commission throughout the report. Further, do not identify your product by acronym, product name, or any other identifier that you anticipate you may copyright.

Appendix A to IAR XX-YY

ENERGY INNOVATIONS SMALL GRANT (EISG) PROGRAM

EISG FINAL REPORT

Project Title

EISG AWARDEE
Name
Address
Phone: (XXX) XXX-XXXX
Email:

AUTHORS

Bob Smith, Principal Investigator

Grant #: XX-XX
Grant Funding: $
Term:
PIER Subject Area:

Legal Notice

This report was prepared as a result of work sponsored by the California Energy Commission (Commission). It does not necessarily represent the views of the Commission, its employees, or the State of California. The Commission, the State of California, its employees, contractors, and subcontractors make no warranty, express or implied, and assume no legal liability for the information in this report; nor does any party represent that the use of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the Commission nor has the Commission passed upon the accuracy or adequacy of the information in this report.

Inquires related to this final report should be directed to the Awardee (see contact information on cover page) or the EISG Program Administrator at (619) 594-1049 or email eisgp@energy.state.ca.us.

Acknowledgement Page
(Optional)

This is the place for the author or principal investigator to acknowledge or express appreciation to those who participated in the project. This may be a paragraph, or a list of names, and if appropriate their affiliations.

Table of Contents

Sample Table of Contents

List of Figures

(Insert list of figures at end of table of contents)

List of Tables

(Insert list of tables after list of figures)
Note: The list of figures and list of tables do not list tables and figures found in the Appendices

Abstract

This section should be the technical counterpart to the executive summary. Less marketing and sales oriented than the Executive Summary. This should be similar to what you would find in a technical trade periodical. Limited to 250 words, essentially a very brief Executive Summary. The Abstract covers the purpose, objectives, outcomes and conclusions. Geared toward a more technical audience.
Key Words: (List 5-10 key words for computer searches)

Executive Summary

A miniature final report that summarizes the content in the following sections in two to three pages:

1. Introduction *(Why this project was necessary)*
2. Project Objectives *(What you planned to accomplish that is measurable or knowable)*
3. Project Outcomes *(What were the actual factual findings)*
4. Conclusions *(What is the meaning or interpretation of the factual findings)*
5. Recommendations *(What you think should occur next)*
6. Public Benefits to California *(Who will benefit from this research)*

Numbered list or bulleted formatting is suggested to keep it short and concise. Assume a non-technical, management-level readership. Put on the hat of an inquisitive, reasonably well-educated lay reader who may be interested in purchasing or implementing the subject technology. The Executive Summary should not introduce new information that is not discussed in the main body of the report.

Introduction

(Why this project was necessary) - Provide relevant background information and overview of the technology/research developed in this project. Describe the "problem" that this project attempted to solve. Also identify this project's PIER subject area and the goals of this research.

Project Objectives

(What you planned to accomplish that is measurable or knowable) - Present the quantifiable technical and economic Objectives for your project. Include all Objectives that were identified in the original scope of work. In order to be listed as an Objective the research plan must have included a method for determining the answer. New Objectives that emerged during the project should also be listed and the reasons for the new direction discussed in the Project Approach section.

Each Objective shall be separately identified, a useful form is:
Project objectives were to:
- Verify (an action verb followed by relevant text)….
- Demonstrate
- Measure…
- Develop….

Project Approach

This section should be organized according to the tasks proposed in your grant application. Discussion of your approach, methods and materials used for each task should be outlined. New tasks that emerged during the project should also be listed and discussed as they occurred during the actual workflow, together with the reasons for the new tasks. Tasks are simply what you did to accomplish your objectives, for example, the testing procedures you undertook and the system modifications and improvements you made.

Project Outcomes

(What were the actual factual findings). This is where you present your data and results. Organize this section so that Outcomes are presented in the same order as the Objectives. A short version of each Outcome should be stated in list form. Supporting paragraphs that describe each Outcome should follow each bullet.

There can be more Outcomes than there were Objectives. For example, there may be more than one Outcome per Objective. It is also possible to have an unanticipated Outcome during your research. However, you cannot have stranded objectives, all Objectives, whether met or not, must be discussed in this section. If this section is particularly long, then it is useful to create a summary at the end of this section where all of the list elements are drawn together as a summary. Also, all Outcomes must be disclosed. You cannot have hidden Outcomes.

Conclusions

(What is the meaning or interpretation of the factual findings)- Organize the Conclusions in the same order as Objectives and Outcomes. This section should provide the analysis of the data and results presented in the previous section. You may have Conclusions that are broader than individual Objectives and Outcomes. Please present these after you present the individual Conclusions. Conclusions must be drawn from evidence presented in the report. You should also include Conclusions regarding the commercialization potential of the proposed technology based on the new research findings.

Recommendations

(What you think should occur next) - Recommendations should derive from the Conclusions presented. Recommendations specific to individual Objectives, Outcomes and Conclusions should be presented in the original order. General Recommendations should follow. What are the next logical research objectives that need to be accomplished to advance this technology?

Public Benefits to California

This section discusses two issues: (1) what Benefits has California already received from this contract, if applicable, and (2) if this project is successful and the results widely used, how will California Benefit. If the Benefit is monetary savings calculate the potential yearly savings and identify all supporting assumptions used in the calculation. All cited Benefits must be attributable to the proposed technology that was the subject of the grant research.

Endnotes

Endnotes are preferred to footnotes.

References

This is where you list all documents referred to in the body of the report. List references in standard bibliographic format. Be sure to check that shorthand references contained in the body of the report are accurate. Any documents referred to in the Appendices should be listed in the reference section in the appropriate Appendix.

Glossary

If there are more than 10 acronyms and/or uncommon technical terms then a glossary with definitions for each should be provided at the end of the report.

Appendices

Designated by Roman numerals. Information that is not directly related to the work that was performed in this project or contains supporting details should be included in the appendices (i.e., summary of literature search, test plans, raw test data, business plans etc.).

All proprietary/confidential information that is needed to fully assess the success of the project should be included in the last appendix and clearly labeled as either proprietary or confidential. The proprietary appendix will be protected and not released to the public. The remainder of the report must be non-proprietary and authorized unrestricted public distribution.

Development Status Questionnaire

The answers provided in this questionnaire will provide the EISG Program Administrator with the information to more fully assess the development status of the project results. This information will be used in conjunction with the final report and other sources to write the independent assessment on the research project, which may include a follow-on funding recommendation within PIER and a recommendation for development assistance.

Answer each question below and provide brief comments where appropriate to clarify status. If you are filling out this form in MS Word the comment block will expand to accommodate inserted text.

Please Identify yourself, and your project: **PI Name** _____ **Grant** # _____

Overall Status

Questions	Comments:
1) Do you consider that this research project proved the feasibility of your concept?	*Briefly state why.*
2) Do you intend to continue this development effort towards commercialization?	*If NO, indicate why and answer only those questions below that are still relevant.*

Engineering/Technical

3) What are the key remaining technical or engineering obstacles that prevent product demonstration?	
4) Have you defined a development path from where you are to product demonstration?	
5) How many years are required to complete product development and demonstration?	
6) How much money is required to complete engineering development and demonstration?	*Do not include commercialization costs such as tooling.*
7) Do you have an engineering requirements specification for your potential product?	*This specification details engineering and manufacturing needs such as tolerances, materials, cost, stress etc. If NO indicate when you expect to have it completed.*

Marketing

8) What market does your concept serve?	*Residential, commercial, industrial, other.*
9) What is the market need?	*Summarize the market need and identify any sources you referenced.*
10) Have you surveyed potential customers for interest in your product?	*If YES, the results of the survey should be discussed in the Final Report.*
11) Have you performed a market analysis that takes external factors into consideration?	*External factors include potential actions by competitors, other new technologies, or changes in regulations or laws that can impact market acceptance of your product?*
12) Have you identified any regulatory, institutional or legal barriers to product acceptance?	*If YES, how do you plan to overcome these barriers?*
13) What is the size of the potential market in California for your proposed technology?	*Identify the sources used to assess market size and any assumptions related to anticipated market penetration.*
14) Have you clearly identified the technology that can be patented?	*If NO, how do you propose to protect your intellectual property?*

15) Have you performed a patent search?	*If YES, was it a self-search or professional search and did you determine if your product infringes or appears to infringe on any other active or expired patent?*
16) Have you applied for patents?	*If YES, provide the number of applications.*
17) Have you secured any patents?	*If YES, provide the patent numbers assigned and indicate if they are generic or application patents.*
18) Have you published any paper or publicly disclosed your concept in any way that would limit your ability to seek patent protection?	*If YES, is it your intent to put the intellectual property into the public domain?*

Commercialization Path

19) Can your organization commercialize your product without partnering with another organization?	*If YES, indicate how you would accomplish that.* *If NO, indicate who would be the logical partners for development and manufacture of the product.*
20) Has an industrial or commercial company expressed interest in helping you take your technology to the market?	*If YES, are they a major player in the marketplace for your product?*
21) Have you developed a commercialization plan?	*If yes,has it been updated since completing your grant work?*
22) What are the commercialization risks?	*Risks are those factors particular to your concept that may delay or block commercialization.*

Financial Plan

23) If you plan to continue development of your concept, do you have a plan for the required funding?	
24) Have you identified funding requirements for each of the development and commercialization phases?	
25) Have you received any follow-on funding or commitments to fund the follow-on work to this grant?	*If YES, indicate the sources and the amount.* *If NO, indicate any potential sources of follow-on funding.*
26) What are the go/no-go milestones in your commercialization plan?	
27) How would you assess the financial risk of bringing this product/service to the market?	
28) Have you developed a comprehensive business plan that incorporates the information requested in this questionnaire?	*If YES, can you attach a non-proprietary version of that plan to your final report?*

Public Benefits

29) What sectors will receive the greatest benefits as a result of your concept?	*Residential, commercial, industrial, the environment, other.*
30) Identify the relevant savings to California in terms of kWh, cost, reliability, safety, environment etc.	*Show all assumptions used in calculations.*
31) Does the proposed technology reduce emissions from power generation?	*If YES, calculate the quantity in total tons per year or tons per year per relevant unit. Show all assumptions used in calculations.*
32) Are there any potential negative effects from the application of this technology with regard to public safety, environment etc.?	*If YES, please specify.*

Competitive Analysis

33) What are the comparative advantages of your product (compared to your competition) and how relevant are they to your customers?	*Identify top 3.*
34) What are the comparative disadvantages of your product (compared to your competition) and how relevant are they to your customers?	*Identify top 3.*

Development Assistance

The EISG Program may in the future provide follow-on services to selected Awardees that would assist them in obtaining follow-on funding from the full range of funding sources (i.e. Partners, PIER, NSF, SBIR, DOE etc.). The types of services offered could include: (1) intellectual property assessment; (2) market assessment; (3) business plan development etc.	
35) If selected, would you be interested in receiving development assistance?	*If YES, indicate the type of assistance that you believe would be most useful in attracting follow-on funding.*